

CONCISE COMMUNICATION

Informal consultations in infectious diseases and clinical microbiology practice

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Informed consultation between physicians is an important part of medical practice. The aim of the study was to evaluate the nature and frequency of such consultations in infectious diseases and clinical microbiology practice. This study was done in five university hospitals. Twenty-one infectious diseases and clinical microbiology specialists participated in informal ('curbside') consultations. In a written questionnaire, physicians were asked to report the number and nature of the informal consultations (ICs) they were asked to provide. A total three hundred and sixty-two such consultations were carried out during a three-month period. The ICs occurred most frequently in the hospital (82.3%). Most of the ICs from outside the hospital were by telephone. Most of the ICs (54.4%) were requested by fellows of specialists. 78.7% of the ICs were requested during working hours. 58.8% of consultations took less than 5 min, 18.8% took 6–10 min, 15.2% took 11–20 min, and 7.2% took over 20 min. The four most common reasons for obtaining ICs were to: help to select an appropriate treatment plan (41.4%), help to select an appropriate prophylaxis (19.3%), interpret laboratory data (10.2%), and provide information about antibiotics (10.2%). 30.1% of ICs resulted in subsequent formal consultation and only four patients (1.1%) were transferred to the consultants' clinics. Informal consultations are a frequent occurrence in the practice of infectious diseases and clinical microbiology (ID&CM). Physicians use this sort of consultation to select an appropriate treatment plan and obtain medical information. This study confirms the importance of the ID&CM specialists as a resource for medical personnel.

Keywords Curbside consultation, Infectious diseases and clinical microbiology, Informal consultation

Accepted 28 July 2002

Clin Microbiol Infect 2003; 9: 724–726

The informal exchange of information or advice between physicians about the diagnosis or management of a particular patient sometimes referred to as 'curbside' or consultation has always been an important part of medical care [1–3]. In Turkey, ID&CM has one training program as one specialty.

The scope of infectious diseases and clinical microbiology is very broad. The patients encountered by ID&CM specialists have frequently been referred by other physicians and consultations.

The aim of this multicenter study was to evaluate the nature and frequency of informal consultations provided by ID&CM specialists.

This study was carried out at five university hospitals in Turkey during a 3-month period. Twenty-one ID&CM specialists participated in consultations. The physicians serve adult patients over the age of 18 years. The informal consultation was defined as any direct conversation or telephone call between a consultant and a physician regarding a particular patient or a clinical

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question. The physician recorded on a questionnaire the following information for each informal consultation: the name, specialty and affiliation of the physician requesting advice; the date, time and duration of the consultation; the type of communication (phone vs. face-to face); the purpose; and the outcome (formal referral recommended or not). The informal consultations were divided into seven categories: (1) a request for advice on therapy, (2) a request for advice on antibiotic prophylaxis, (3) a request for information about microorganisms and infection, (4) a request for information about antibiotics, (5) a request for help in the interpretation of laboratory data, (6) questions regarding infection control, or (7) questions regarding immunization. Physicians requesting advice were not aware of this study.

Three hundred and sixty-two curbside consultations were carried out during a three-month period. The number of informal consultations received from each doctor ranged widely, from one to 58 with an average of 17.2 consultations per doctor. Physicians reported an average of 1.4 such consultations per week. The informal consultations occurred most frequently in the hospital (82.3%). One hundred and ninety-nine (55%) of such consultations were obtained by telephone. Most of the informal consultations (54.4%) were requested by fellows of the specialists, then by specialists themselves (22.9%) and, lastly, by general practitioners (8.8%).

Two hundred and eighty-five (78.7%) of the ICs were requested during working hours. 58.8% of consultations took less than 5 min, 18.8% took 6–10 min, 15.2% took 11–20 min, and 7.2% took over 20 min. A total 3838 min were spent on informal consultations. The average amount of time spent for performing informal consultation was 10.6 min.

The four most common reasons for obtaining informal consultations were to help to select an appropriate treatment plan (41.4%), help to select an appropriate prophylaxis (19.3%), to interpret laboratory data (10.2%) and to request information about antibiotics (10.2%) (Table 1).

30.1% of informal consultations resulted in subsequent formal consultation and only four patients (1.1%) were transferred to the consultants' clinics. Face-to-face interaction during a clinic visit is the traditional method for delivering medical care and communicating between physicians, but this tradition is being challenged by simple, inexpensive

Table 1 Curbside consultation topics

Reasons for referral	<i>n</i>	%
Advice on therapy	150	41.4
Advice on antimicrobial prophylaxis	70	19.3
Information about antibiotics	37	10.2
Interpretation of laboratory data	37	10.2
Questions regarding immunization	35	9.7
Information about microorganisms and infection	21	5.8
Questions regarding infection control	12	3.3

communication tools, such as the telephone [4], E-mail [5]: or internet listservers [6]. In the current study, we describe 362 informal consultation requests between physicians and ID&CM specialists at five academic centers. Most of the previous studies reported on a local population of physicians at one academic medical center [3,7,8]. This study shows the multicenter experience of ID&CM specialists in providing informal consultations. It was shown that informal consultations play a significant role in the management of patients hospitalized at institutions. There are several advantages for the physician requesting advice, the most obvious being convenient access to information. The physicians may also need help in formulating a clinical management plan. This information or advice, provided at no cost to the patient, enables the inquiring clinician to maintain control of the patient's care [3].

Informal consultations are an important way for physicians to stay up to date with medical knowledge [2,9]. The questions from physicians in practice were mainly in reference to: the antimicrobial treatment of patients with urinary-tract infections, postoperative surgical-site infections, intrabdominal infections, prophylaxis for hepatitis, tetanus, rabies and the interpretation of laboratory data mainly regarding hepatitis serology (data not shown). These questions provide potential topics for residency and continuing medical education programs. Informal consultations may facilitate patient management and physician education by providing a convenient access to case-oriented input from specialists. Informal consultation also has advantages for the consulting physician. Such questions may force the consulting physicians to search for the answer [2].

77.6% of informal consultations took less than 10 min, and thus, compared to the formal consultations, curbside consultations are a faster and

time-saving way to get advice. The duration and frequency of informal consultation are similar to, or less than, those reported in other studies of informal consultation [1,3,7,10].

Informal consultations sometimes (30.1%) result in a subsequent official consultation. A minority of patients were transferred to referees' clinics, thus informal consultations may reduce the overall number of formal referrals required and time for consultations.

Informal consultations have some potential disadvantages. There is some concern about the quality of the information exchanged [1], legal liability [9] and the fact that there is no reimbursement for the consultant physician [11]. To reduce the risk of inaccurate communication and legal liability, a consultant should avoid giving specific advice about a patient whom they have not examined, answer queries in general terms, and consider keeping a written record of the interaction [12]. Perhaps the consultant physicians could document the amount of time they spend on ICs and the administration of the medical center could provide a fee for this effort. Informal consultations are a frequent occurrence in the practice of ID&CM. Physicians use these consultations to select an appropriate treatment plan and obtain medical information. This study confirms the importance of the ID&CM specialists as a resource for medical personnel.

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